

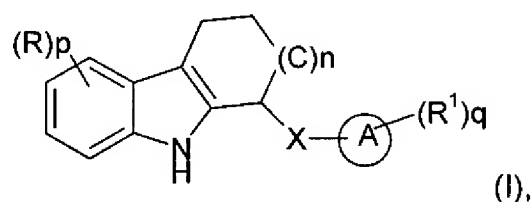
### **Amendments To The Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **In the Claims:**

What is claimed is:

1. (Amended) A compound of formula (I):



wherein:

n is 0, 1, or 2;

X is NH, or O, or S(O)<sub>m</sub>;

each R is the same or different and is independently selected from the group consisting

of halogen, haloalkyl, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, -R<sup>10</sup>cycloalkyl, Ay, -NHR<sup>10</sup>Ay, Het, -NHHet, -NHR<sup>10</sup>Het, -OR<sup>2</sup>, -OAY, -OHet, -R<sup>10</sup>OR<sup>2</sup>, -NR<sup>2</sup>R<sup>3</sup>, -NR<sup>2</sup>Ay, -R<sup>10</sup>NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>NR<sup>2</sup>Ay, -R<sup>10</sup>C(O)R<sup>2</sup>, -C(O)R<sup>2</sup>, -CO<sub>2</sub>R<sup>2</sup>, -R<sup>10</sup>CO<sub>2</sub>R<sup>2</sup>, -C(O)NR<sup>2</sup>R<sup>3</sup>, -C(O)Ay, -C(O)NR<sup>2</sup>Ay, -C(O)Het, -C(O)NHR<sup>10</sup>Het, -R<sup>10</sup>C(O)NR<sup>2</sup>R<sup>3</sup>, -C(S)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>C(S)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>NHC(NH)NR<sup>2</sup>R<sup>3</sup>, -C(NH)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>C(NH)NR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>2</sub>NR<sup>2</sup>Ay, -R<sup>10</sup>SO<sub>2</sub>NHCOR<sup>2</sup>, -R<sup>10</sup>SO<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>SO<sub>2</sub>R<sup>2</sup>, -S(O)<sub>m</sub>R<sup>2</sup>, cyano, nitro, or azido;

each R<sup>1</sup> is the same or different and is independently selected from the group

consisting of halogen, haloalkyl, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, -R<sup>10</sup>cycloalkyl, Ay, -NHR<sup>10</sup>Ay, Het, -NHHet, -NHR<sup>10</sup>Het, -OR<sup>2</sup>, -OAY, -OHet, -R<sup>10</sup>OR<sup>2</sup>, -NR<sup>2</sup>R<sup>3</sup>, -NR<sup>2</sup>Ay, -R<sup>10</sup>NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>NR<sup>2</sup>Ay, -

$R^{10}C(O)R^2$ ,  $-C(O)R^2$ ,  $-CO_2R^2$ ,  $-R^{10}CO_2R^2$ ,  $-C(O)NR^2R^3$ ,  $-C(O)Ay$ ,  $-C(O)NR^2Ay$ ,  $-C(O)Het$ ,  $-C(O)NHR^{10}Het$ ,  $-R^{10}C(O)NR^2R^3$ ,  $-C(S)NR^2R^3$ ,  $-R^{10}C(S)NR^2R^3$ ,  $-R^{10}NHC(NH)NR^2R^3$ ,  $-C(NH)NR^2R^3$ ,  $-R^{10}C(NH)NR^2R^3$ ,  $-S(O)_2NR^2R^3$ ,  $-S(O)_2NR^2Ay$ ,  $-R^{10}SO_2NHCOR^2$ ,  $-R^{10}SO_2NR^2R^3$ ,  $-R^{10}SO_2R^2$ ,  $-S(O)_mR^2$ , cyano, nitro, or azido;

each m independently is 0, 1, or 2;

each  $R^{10}$  is the same or different and is independently selected from alkylene, cycloalkylene, alkenylene, cycloalkenylene, and alkynylene;

p and q are each independently selected from 0, 1, 2, 3, 4, or 5;

each of  $R^2$  and  $R^3$  are the same or different and are independently selected from the group consisting of H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl,  $-R^{10}$ cycloalkyl,  $-R^{10}OH$ ,  $-R^{10}(OR^{10})_w$ , and  $-R^{10}NR^4R^5$ ;

w is 1-10;

each of  $R^4$  and  $R^5$  are the same or different and are independently selected from the group consisting of alkyl, cycloalkyl, alkenyl, cycloalkenyl, and alkynyl;

Ay represents an aryl group;

Het represents a 5- or 6-membered heterocyclyl or heteroaryl group;

ring A is aryl or heteroaryl; ~~and or a~~

pharmaceutically acceptable salt or solvate ~~salts, solvates, and physiologically functional derivatives~~ thereof.

2. (Original) The compound of claim 1 wherein X is NH.
3. (Original) The compound of claim 1 wherein alkyl is  $C_1$ - $C_6$  alkyl, alkoxy is  $C_1$ - $C_6$  alkoxy, and haloalkyl is  $C_1$ - $C_6$  haloalkyl.
4. (Original) The compound of claim 1 wherein at least p or q is not 0.
5. (Original) The compound of claim 1 wherein both p and q are each 1.
6. (Original) The compound of claim 1 wherein n is 1 or 2.

7. (Original) The compound of claim 6 wherein n is 1.
8. (Original) The compound of claim 1 wherein R is selected from halogen, alkyl, haloalkyl, cycloalkyl,  $-R^{10}$ cycloalkyl, Ay, Het,  $-OR^2$ ,  $-R^{10}OR^2$ ,  $-NR^2R^3$ ,  $-COR^2$ ,  $-CO_2R^2$ ,  $-CONR^2R^3$ ,  $-S(O)_2NR^2R^3$ , cyano, nitro, or azido.
9. (Original) The compound of claim 8 wherein R is selected from halogen, alkyl, haloalkyl, cycloalkyl,  $-R^{10}$ cycloalkyl, Ay, Het,  $-R^{10}OR^2$ ,  $-NR^2R^3$ ,  $-COR^2$ ,  $-CONR^2R^3$ ,  $-S(O)_2NR^2R^3$ , or cyano.
10. (Original) The compound of claim 9 wherein R is selected from halogen, alkyl, or haloalkyl.
11. (Original) The compound of claim 10 wherein R is selected from Cl or Br.
12. (Previously presented) The compound of claim 10 wherein R is substituted *para* to the depicted N atom.
13. (Original) The compound of claim 1 wherein  $R^1$  selected from halogen, alkyl, haloalkyl, Ay, Het,  $-OR^2$ ,  $-R^{10}OR^2$ ,  $-NR^2R^3$ ,  $-COR^2$ ,  $-CO_2R^2$ ,  $-CONR^2R^3$ ,  $-S(O)_2NR^2R^3$ ,  $-S(O)_mR^2$ , cyano, nitro, or azido.
14. (Original) The compound of claim 13 wherein  $R^1$  is selected from halogen, alkyl, haloalkyl,  $-OR^2$ , cyano, or nitro.
15. (Currently amended) The ~~compouns~~ compound of claim 14 wherein  $R^1$  is selected from halogen, alkyl, haloalkyl,  $-OR^2$ .

16. (Original) The compound of claim 15 wherein q is 1 or 2.
17. (Original) The compound of claim 1 wherein the A ring is aryl.
18. (Original) The compound of claim 17 wherein the A ring is phenyl.
19. (Original) The compound of claim 1 wherein the A ring is heteroaryl.
20. (Original) The compound of claim 19 wherein the heteroaryl is pyrimidinyl, pyridyl, or benzothiazolyl.
21. (Original) The compound of claim 20 wherein the heteroaryl is pyrimidinyl or pyridyl.
22. (Original) The compound of claim 21 wherein q is 0, 1, or 2.
23. (Original) The compound of claim 1 wherein when p is not 0, then each R is the same or different and is independently selected from the group consisting of halogen, haloalkyl, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, -R<sup>10</sup>cycloalkyl, Ay, -NHR<sup>10</sup>Ay, Het, -NHHet, -NHR<sup>10</sup>Het, -R<sup>10</sup>OR<sup>2</sup>, -NR<sup>2</sup>R<sup>3</sup>, -NR<sup>2</sup>Ay, -R<sup>10</sup>NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>NR<sup>2</sup>Ay, -R<sup>10</sup>C(O)R<sup>2</sup>, -C(O)R<sup>2</sup>, -CO<sub>2</sub>R<sup>2</sup>, -R<sup>10</sup>CO<sub>2</sub>R<sup>2</sup>, -C(O)NR<sup>2</sup>R<sup>3</sup>, -C(O)Ay, -C(O)NR<sup>2</sup>Ay, -C(O)Het, -C(O)NHR<sup>10</sup>Het, -R<sup>10</sup>C(O)NR<sup>2</sup>R<sup>3</sup>, -C(S)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>C(S)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>NHC(NH)NR<sup>2</sup>R<sup>3</sup>, -C(NH)NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>C(NH)NR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>2</sub>NR<sup>2</sup>Ay, -R<sup>10</sup>SO<sub>2</sub>NHCO<sup>2</sup>, -R<sup>10</sup>SO<sub>2</sub>NR<sup>2</sup>R<sup>3</sup>, -R<sup>10</sup>SO<sub>2</sub>R<sup>2</sup>, -S(O)<sub>m</sub>R<sup>2</sup>, cyano, nitro, or azido.
24. (Original) The compound of claim 1 selected from  
6-Bromo-N-phenyl-2,3,4,9-tetrahydro-1H-carbazol-1-amine  
6-Chloro-N-phenyl-2,3,4,9-tetrahydro-1H-carbazol-1-amine  
6-Chloro-N-(4-methoxyphenyl)-2,3,4,9-tetrahydro-1H-carbazol-1-amine  
6-Chloro-N-(4-chlorophenyl)-2,3,4,9-tetrahydro-1H-carbazol-1-amine

6-Chloro-*N*-(4-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4-methylphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(4-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(4-chlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(4-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride  
6-Chloro-*N*-pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4,6-dimethoxypyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4-methylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4,6-dimethylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-pyridin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride  
6-Bromo-*N*-(5-propylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Methoxy-*N*-pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Methoxy-*N*-pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
*N*-(4,6-Dimethoxypyrimidin-2-yl)-6-methyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
hydrochloride  
6-Bromo-*N*-(4,6-dimethylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
hydrochloride  
6-Bromo-*N*-[5-(trifluoromethyl)pyrimidin-2-yl]-2,3,4,9-tetrahydro-1*H*-carbazol-1-  
amine  
6-Bromo-*N*-[5-(trifluoromethyl)pyridine-2-yl]-2,3,4,9-tetrahydro-1*H*-carbazol-1-  
amine  
6-[(6-Bromo-2,3,4,9-tetrahydro-1*H*-carbazol-1-yl)amino]nicotinonitrile  
*N*-(1,3-Benzothiazol-2-yl)-6-bromo-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
*N*-Pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
2-Bromo-*N*-pyrimidin-2-yl-5,6,7,8,9,10-hexahydrocyclohepta[*b*]indol-6-amine  
6-Methyl-*N*-pyridin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride salt  
Methyl 1-anilino-2,3,4,9-tetrahydro-1*H*-carbazole-6-carboxylate  
6-[(6-Methyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-yl)amino]nicotinonitrile  
hydrochloride salt  
*N*-Phenyl-6-(trifluoromethyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride

*N*-Phenyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(3-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(3-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(1*H*-indol-5-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(2-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(2-chlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(2-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(3,4-dichlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine; and  
6-Bromo-*N*-(4-fluorophenoxy)-2,3,4,9-tetrahydro-1*H*-carbazole.

25. (Currently amended) The compound of claim 1 selected from  
6-Bromo-*N*-phenyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-phenyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4-chlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4-methylphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(4-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(4-chlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-(4-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride  
6-Chloro-*N*-pyrimidin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4,6-dimethoxypyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4-methylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Chloro-*N*-(4,6-dimethylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
6-Bromo-*N*-pyridin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride  
6-Bromo-*N*-(5-propylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
*N*-(4,6-Dimethoxypyrimidin-2-yl)-6-methyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
hydrochloride  
6-Bromo-*N*-(4,6-dimethylpyrimidin-2-yl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine  
hydrochloride

6-Bromo-*N*-[5-(trifluoromethyl)pyrimidin-2-yl]-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine

6-Bromo-*N*-[5-(trifluoromethyl)pyridine-2-yl]-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine

6-[(6-Bromo-2,3,4,9-tetrahydro-1*H*-carbazol-1-yl)amino]nicotinonitrile

*N*-(1,3-Benzothiazol-2-yl)-6-bromo-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine

2-Bromo-*N*-pyrimidin-2-yl-5,6,7,8,9,10-hexahydrocyclohepta[*b*]indol-6-amine

6-Methyl-*N*-pyridin-2-yl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride salt

Methyl 1-anilino-2,3,4,9-tetrahydro-1*H*-carbazole-6-carboxylate

6-[(6-Methyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-yl)amino]nicotinonitrile hydrochloride salt

*N*-Phenyl-6-(trifluoromethyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine hydrochloride

*N*-Phenyl-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine

6-Bromo-*N*-(3-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine

6-Bromo-*N*-(3-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine

6-Bromo-*N*-(2-methoxyphenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine

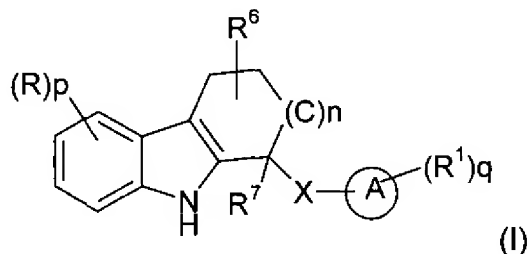
6-Bromo-*N*-(2-chlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine

6-Bromo-*N*-(2-fluorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine

6-Bromo-*N*-(3,4-dichlorophenyl)-2,3,4,9-tetrahydro-1*H*-carbazol-1-amine; and

6-Bromo-*N*-(4-fluorophenoxy)-2,3,4,9-tetrahydro-1*H*-carbazole.

26. (Currently amended) ~~The A compound of claim 1 wherein the compound of~~  
formula (I) ~~further comprises~~ according to claim 1:



~~including salts, solvates and pharmaceutically functional derivatives~~ wherein  
R<sup>6</sup> is H, alkyl, -OR<sup>2</sup>, -NR<sup>2</sup>R<sup>3</sup>, Ay, Het, -C(O)R<sup>2</sup>, -CO<sub>2</sub>R<sup>2</sup>, -CONR<sup>2</sup>R<sup>3</sup>, -S(O)<sub>m</sub>R<sup>2</sup>, or  
oxo, where R<sup>2</sup> and R<sup>3</sup> are as defined above; and

$R^7$  is H or alkyl, provided that  $R^6$  and  $R^7$  are not both H; or a pharmaceutically acceptable salt or solvate thereof.

27. (Cancelled).

28. (Previously presented) A pharmaceutical composition comprising a compound according to claim 1 and a pharmaceutically acceptable carrier.

29. - 37 (Cancelled).

38. (Currently amended) A method for the treatment ~~or prophylaxis~~ of ~~oncogenic viruses, including adenoviruses, retroviruses, and a papovavirus family infection,~~ including polyoma viruses infection and papilloma viruses infection comprising the ~~administration~~ administering to a subject in need thereof of a therapeutically effective amount of a compound according to ~~any one of~~ claim 1.

39. (Currently amended) A method for the treatment ~~or prophylaxis~~ of conditions or disorders due to HPV infection comprising ~~the administration~~ administering to a subject in need thereof of a therapeutically effective amount of a compound according to ~~any one of~~ claim 1.

40. (Original) The method of claim 39 wherein the condition or disorder is warts, genital warts, cervical dysplasia, recurrent respiratory papillomatosis, or cancers associated with papillomavirus infection.